

# INTERNATIONAL SEARCH REPORT

Internu I Application No  
PCT/GB2004/003116

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 B41J2/175 B41J2/14

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 B41J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 152 559 A (KOJIMA MASATOMO) 28 November 2000 (2000-11-28)	1, 3, 8, 9
Y	column 2, line 10 - line 62 figure 1	13
X	US 2002/180827 A1 (HIROTA ATSUSHI) 5 December 2002 (2002-12-05) the whole document	1, 3, 8, 9
X	US 5 561 448 A (HIROSAWA TOSHIKI ET AL) 1 October 1996 (1996-10-01) column 1, line 37 - line 51 figure 1	1-3, 8, 9
Y	WO 03/022586 A (MANNING HOWARD JOHN ; PHILIPS CHRISTOPHER DAVID (GB); XAAR TECHNOLOGY) 20 March 2003 (2003-03-20) the whole document	13
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

2 February 2005

Date of mailing of the international search report

14 FEB. 2005

Name and mailing address of the ISA

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## C(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003/058307 A1 (EGUCHI TAKEO ET AL) 27 March 2003 (2003-03-27) paragraphs '0119! - '0127!; figure 10	1
A	EP 0 965 452 A (CANON KK) 22 December 1999 (1999-12-22) paragraphs '0035! - '0037! figure 4	1
A	PATENT ABSTRACTS OF JAPAN vol. 2002, no. 09, 4 September 2002 (2002-09-04) & JP 2002 144576 A (CANON INC), 21 May 2002 (2002-05-21) abstract	1
X	EP 0 924 077 A (LEXMARK INTERNATIONAL, INC) 23 June 1999 (1999-06-23) paragraphs '0017! - '0021! figures 3,4	14,25
X	EP 0 737 580 A (CANON KABUSHIKI KAISHA) 16 October 1996 (1996-10-16) page 12, line 46 - page 13, line 40 figures 18,19	21
A	US 5 818 485 A (REZANKA ET AL) 6 October 1998 (1998-10-06) the whole document	21

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## Box II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-13

Droplet deposition apparatus with a porous element between the ink chamber and the inlet or outlet manifolds  
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2. claims: 14-29

Droplet deposition apparatus with a net flow in the array direction in the inlet manifold and no net flow in the array direction in the plenum chamber.  
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

Internu

d Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6152559	A	28-11-2000	JP 10151761 A	09-06-1998
US 2002180827	A1	05-12-2002	JP 2002355961 A	10-12-2002
			JP 2002355962 A	10-12-2002
			JP 2002355963 A	10-12-2002
US 5561448	A	01-10-1996	AT 139941 T	15-07-1996
			DE 69120569 D1	08-08-1996
			DE 69120569 T2	09-01-1997
			EP 0448967 A1	02-10-1991
			EP 0673771 A2	27-09-1995
			JP 3090698 B2	25-09-2000
			JP 4211962 A	03-08-1992
			US 5231424 A	27-07-1993
			AT 193247 T	15-06-2000
			DE 69132223 D1	29-06-2000
			DE 69132223 T2	25-01-2001
WO 03022586	A	20-03-2003	BR 0205986 A	21-10-2003
			EP 1425177 A2	09-06-2004
			WO 03022586 A2	20-03-2003
			US 2005007399 A1	13-01-2005
US 2003058307	A1	27-03-2003	JP 2003080696 A	19-03-2003
			JP 2003080711 A	19-03-2003
EP 0965452	A	22-12-1999	JP 2000071477 A	07-03-2000
			DE 69904876 D1	20-02-2003
			DE 69904876 T2	20-11-2003
			EP 0965452 A1	22-12-1999
			US 6250752 B1	26-06-2001
JP 2002144576	A	21-05-2002	NONE	
EP 0924077	A	23-06-1999	US 6264309 B1	24-07-2001
			EP 0924077 A2	23-06-1999
			JP 11240174 A	07-09-1999
EP 0737580	A	16-10-1996	JP 9066605 A	11-03-1997
			AT 208275 T	15-11-2001
			AT 220372 T	15-07-2002
			AT 221461 T	15-08-2002
			AU 5066396 A	24-10-1996
			AU 704715 B2	29-04-1999
			AU 5066596 A	24-10-1996
			AU 5066996 A	24-10-1996
			CA 2174179 A1	15-10-1996
			CA 2174181 A1	15-10-1996
			CA 2174182 A1	15-10-1996
			CN 1133783 A ,C	23-10-1996
			CN 1156666 A ,C	13-08-1997
			CN 1145854 A ,C	26-03-1997
			DE 69616630 D1	13-12-2001
			DE 69616630 T2	01-08-2002
			DE 69622217 D1	14-08-2002
			DE 69622217 T2	05-12-2002
			DE 69622621 D1	05-09-2002
			DE 69622621 T2	27-02-2003

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Internal

Application No

PCT/GB2004/003116

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0737580	A	EP 0737580 A2	16-10-1996
		EP 0737582 A2	16-10-1996
		EP 0737581 A2	16-10-1996
		JP 9052364 A	25-02-1997
		JP 3472030 B2	02-12-2003
		JP 9131874 A	20-05-1997
		KR 230162 B1	15-11-1999
		KR 216618 B1	16-08-1999
		KR 230161 B1	15-11-1999
		SG 49834 A1	15-06-1998
		SG 48138 A1	17-04-1998
		SG 48364 A1	17-04-1998
		TW 446639 B	21-07-2001
		US 2002036675 A1	28-03-2002
		US 6074543 A	13-06-2000
		US 6270199 B1	07-08-2001
		US 6331050 B1	18-12-2001
US 5818485	A	06-10-1998	JP 10157110 A
			16-06-1998